REMARKS/ARGUMENTS

Applicants appreciate the Examiner's thorough search and examination of the present patent application.

Claims 14-16 and 20 stand allowed.

Applicants note with appreciation the Examiner's indication that claims 6-7 would be allowable if rewritten in independent form. Claim 6 has been rewritten in independent form. Claim 7 depends indirectly from claim 3 which is believed to define patentable subject matter and, therefore, is believed to be in condition for allowance.

Claims 1, 3-7, 10, 11 and 14 have been amended to more clearly define applicants' invention. Applicants respectfully submit that the changes to these claims make explicit that which applicants believed to be already implicit and, accordingly, are not made for statutory purposes related to patentability.

Claims 1-5, and 8-12 stand rejected under 35 U.S.C. §102(b)

Applicants' claim 1, as amended, comprises a method for simulating the effect of an exploding projectile that includes an "simulated impact area that would be affected by the exploding projectile," "emitting a weapon signal" that defines "a first portion of the simulated impact area less than the entire simulated impact area," "detecting the weapon signal by a sensor located near a target area" and "transmitting an impact signal when the weapon signal is sensed by the sensor and causing the transmitted impact signal to define the first portion of the simulated impact area and a second portion of the impact area which is at least partially outward of the first portion when the weapon signal is sensed by the sensor[.]"

The Examiner is respectfully referred to page 4, lines 18-20 of applicants' written description which describes a portion of the impact signal as "locations which cannot be attained by [a] hit signal of the weapon itself." Applicants respectfully submit that, effectively, the impact signal relates to a simulated impact area resulting from weapons that allow shooting around a corner of a structure. The shape of the impact area (including both the first and second portions) can be determined by the method of claim 1.

Robertsson, in contrast, regards a gunnery target scoring system which allows for practice sighting and firing a weapon towards a target (see column 1, lines 36-40 and column 4, lines 52-55). Robertsson's invention calculates elevation and lateral settings of the weapon in order to

improve accuracy, and does not teach or suggest a simulated impact signal covering a first portion and a second portion of a simulated impact area in which the second portion comprises part of the simulated impact area not defined by a weapon signal. Instead, Robertsson teaches determining a detonation point using, among other things, a selected ammunition, firing time and a calculated distance between the weapon and a target. Robertsson uses a numeric system to determine the effectiveness of the weapon, and to determine the effect of the detonation by comparing the extension of the target in the firing direction and the divergence of the detonation point in the lateral and elevational direction. Applicants respectfully submit that Robertsson numeric system is different from applicants' impact signal and does not cover a second portion of an impact area. Robertsson also calculates a "hit effect number" to represent the susceptibility of the target and the type of ammunition used (see column 5, line 52-column 6, line 26). The hit effect number is used to determine whether the target has been knocked out, and, unlike applicants' claim 1, does not represent a simulated impact area including a first portion which is covered by the weapon signal and a second portion which is not covered by the weapon signal.

Applicants respectfully submit that Robertsson does not teach or suggest elements of applicants' claim 1, and, therefore, claim 1 is not anticipated by Robertsson.

Claim 2 includes all of the features of claim 1 and, therefore, is patentable for the same reasons as well.

Claim 3 includes the features of claim 1 described above with respect to a weapon signal defining a first portion of a simulated impact area and an impact signal defining the first portion and a second portion of the simulated impact area which is at least partially outward of the first portion. Therefore, Robertsson's transmitter, which serves to identify the location where a projectile detonates, does not emit an impact signal over the impact area of the simulated projectile. Thus, applicants respectfully submit that claim 3 is not anticipated by Robertsson, and, accordingly, claim 3 is patentable.

Claims 4 and 5 include all of the features of claim 3 and, therefore, are patentable for the same reasons as well.

Claims 8-12 depend directly or indirectly from claim 3, and are, therefore, allowable for the same reasons as well as because of the combination of features set forth in those claims with the features in the claim(s) from which they depend.

Claims 13 and 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Robertsson in view of Hopmeier et al. ("Hopmeier", U.S. Patent Number 6,599,127). Applicants respectfully traverse this rejection.

The Examiner states in the prior Office Action, that Robertsson discloses all of the claimed subject matter of claim 13, with the exception of explicitly disclosing that transmitter 27 emits an impact signal in the form of laser light. Accordingly, the Examiner cites to Hopmeier for disclosing a device "for simulating the effect of exploding projectiles fired by a weapon toward a target area, wherein simulated weapon 108 transmits a weapon signal to a sensor of controller 104, and wherein controller 104 transmits an impact signal to gas supply 102 via laser light." The Examiner concludes that it would have been obvious to an artisan to modify the transmitted impact signal of Robertsson by transmitting laser light beam of Hopmeier in order to "provide a suitable form of broadcast communication, and thereby providing a wireless link for transmitting impact information to other devices to simulate an explosion." Applicants respectfully disagree.

Applicants respectfully maintain that elements of applicants' claim 3 are missing from the teachings of Robertsson. More particularly, Robertsson does not teach or suggest a transmitter that emits an impact signal over the simulated impact area of the simulated projectile, as defined by applicants' claim 3. Applicants respectfully submit that Hopmeier does not cure this deficiency, and does not teach or suggest elements of applicants' claim 3 that are missing from the teachings of Robertsson. Applicants respectfully submit that the combination of Robertsson and Hopmeier does not teach the transmitter of applicants' claim 13, which depends directly from claim 3, and, therefore, claim 13 is not obvious over the combined teachings of Robertsson and Hopmeier.

Claims 17-19 depend directly or indirectly from claim 3, and, therefore, are patentable for the same reasons as well as because of the combination of features set forth in those claims with the features set forth in the claim(s) from which they depend.

For the reasons set forth above, claims 1-20 are believed to be in condition for allowance.

EXPRESS MAIL CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail to Addressee (mail label #EV343679566US) in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on January 5, 2005:

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Respectfully submitted,

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